

**CERTIFICATE OF EXPRESS MAILING UNDER 37 CFR 1.10**

Express Mail mailing label number: EL923248682US

Applicant: Alan Lee Taylor, Christopher Adam Norris,  
William Paul Hotle, and Kenneth John Hayman

Title: Method and System for Establishing, Maintaining, and  
Using a Persistent Fracture Log

Date of Deposit September 21, 2001

Type of Document(s) Certificate of Express Mailing and Transmittal  
Under 37 CFR 1.53 (2 pages);  
Utility Patent Application Transmittal (1 page);  
Fee Transmittal (1 page);  
Specification (39 pages including 21 claims and Abstract);  
Drawings (11 sheets);  
Unexecuted Declaration and Power of Attorney (3 pages);  
Request and Certification Under 37 U.S.C. 122(b)(2)(B)(i) (1 page);  
Return postcard.

Serial No.: Unassigned

Filing Date: Herewith

**TRANSMITTAL LETTER UNDER 37 CFR 1.53**

Sir:

Enclosed for filing is the above-identified application consisting of a specification as prescribed by 35 U.S.C. 112, containing a description pursuant to 37 C.F.R. 1.71 and at least one claim pursuant to 37 C.F.R. 1.75, and drawings required by 37 C.F.R. 1.81(a).

The inventors in this application are set forth as follows:

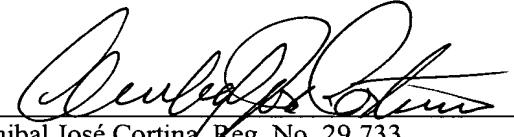
NAME	ADDRESS	CITIZENSHIP
Alan Lee Taylor	107 Swan Quarter Drive Apex, North Carolina	USA
Christopher Adam Norris	1005 Windsor Ridge Drive Westborough, Massachusetts	USA
William Paul Hotle	1011 East Beechmont Circle Apex, North Carolina	USA
Kenneth John Hayman	125 Dry Creek Court Apex, North Carolina	Australia

In addition, also attached is an unexecuted inventorship Declaration showing the necessary inventorship information, and an Application Transmittal form setting forth the necessary details concerning the application as filed.

Please direct all correspondence to:

Anibal José Cortina, Reg. No. 29,733  
Kilpatrick Stockton LLP  
3737 Glenwood Avenue, Suite 400  
Raleigh, North Carolina 27612  
Telephone: 919-420-1820  
Telecopier: 919-420-1800  
Customer No. 28372

Respectfully submitted,



Anibal José Cortina, Reg. No. 29,733  
Kilpatrick Stockton LLP  
3737 Glenwood Avenue, Suite 400  
Raleigh, North Carolina 27612  
Telephone: 919-420-1820  
Telecopier: 919-420-1800  
Customer No. 28372

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.10

I hereby certify that the documents identified above are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on September 21, 2001, addressed to the Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Susan V. Barden  
Signature

Susan V. Barden  
Printed Name

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09/21/01  
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9-24-01

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 40921/261784

First Inventor Alan Lee Taylor

Title Method and System for Establishing, Maintaining, and Using a Persistent Fracture Log

Express Mail Label No. EL923248682US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 39]  
*(preferred arrangement set forth below)*
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (*if filed*)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C. 113) [Total Sheets 11]
5. Oath or Declaration [Total Pages 3]
  - a.  Unexecuted (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63 (d))  
*(for a continuation/divisional with Box 18 completed)*
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
*(if applicable, all necessary)*
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  paper
  - c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 C.F.R. §3.73(b) Statement  Power of Attorney  
*(when there is an assignee)*
11.  English Translation Document (*if applicable*)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
15.  Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16.  Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other: Certif. Of Express Mail and Transmittal Letter Under 37 CFR 1.53 (2 pages).

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation  Divisional  Continuation-in-part (CIP) of prior application No: \_\_\_\_\_ / \_\_\_\_\_

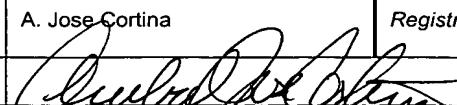
Prior application information: Examiner \_\_\_\_\_ Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

<input type="checkbox"/> Customer Number or Bar Code Label	28372 (Insert Customer No. or Attach bar code label here)	or <input type="checkbox"/> Correspondence address below
--	--	--

Name	A. Jose Cortina				
	Kilpatrick Stockton LLP				
Address	3737 Glenwood Avenue				
	Suite 400				
City	Raleigh	State	North Carolina	Zip Code	27612
Country	USA	Telephone	919-420-1820	Fax	919-420-1800

Name (Print/Type)	A. Jose Cortina	Registration No. (Attorney/Agent)	29,733
Signature			
		Date	September 21, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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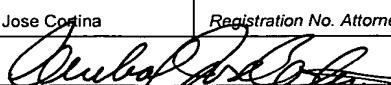
# FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT**(\$)  
0

Complete if Known	
Application Number	Unassigned
Filing Date	Herewith
First Named Inventor	Alan Lee Taylor
Examiner Name	Unassigned
Group / Art Unit	Unassigned
Attorney Docket No.	40921/261784

METHOD OF PAYMENT (check one)						FEE CALCULATION (continued)																																																																																																																																																																																																																																								
<p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:</p> <p>Deposit Account Number 16/1435</p> <p>Deposit Account Name Kilpatrick Stockton LLP</p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p>						<p>3. ADDITIONAL FEES</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td colspan="2">Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td colspan="2">Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td colspan="2">Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td colspan="2">For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td colspan="2">Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td colspan="2">Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td colspan="2">Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td colspan="2">Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td colspan="2">Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,390</td><td>218</td><td>695</td><td colspan="2">Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,890</td><td>228</td><td>945</td><td colspan="2">Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td colspan="2">Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td colspan="2">Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td colspan="2">Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td colspan="2">Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td colspan="2">Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,240</td><td>241</td><td>620</td><td colspan="2">Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,240</td><td>242</td><td>620</td><td colspan="2">Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>440</td><td>243</td><td>220</td><td colspan="2">Design issue fee</td><td></td></tr> <tr><td>144</td><td>600</td><td>244</td><td>300</td><td colspan="2">Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td colspan="2">Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>130</td><td>123</td><td>130</td><td colspan="2">Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td colspan="2">Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td colspan="2">Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>710</td><td>246</td><td>355</td><td colspan="2">Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>710</td><td>249</td><td>355</td><td colspan="2">For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>710</td><td>279</td><td>355</td><td colspan="2">Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td colspan="2">Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="6">Other fee (specify) _____</td> <td colspan="6"></td> </tr> <tr> <td colspan="6">*Reduced by Basic Filing Fee Paid</td> <td colspan="6">SUBTOTAL (3) (\$) 0</td> </tr> </tbody> </table>						Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description		Fee Paid	105	130	205	65	Surcharge - late filing fee or oath			127	50	227	25	Surcharge - late provisional filing fee or cover sheet			139	130	139	130	Non-English specification			147	2,520	147	2,520	For filing a request for reexamination			112	920*	112	920*	Requesting publication of SIR prior to Examiner action			113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action			115	110	215	55	Extension for reply within first month			116	390	216	195	Extension for reply within second month			117	890	217	445	Extension for reply within third month			118	1,390	218	695	Extension for reply within fourth month			128	1,890	228	945	Extension for reply within fifth month			119	310	219	155	Notice of Appeal			120	310	220	155	Filing a brief in support of an appeal			121	270	221	135	Request for oral hearing			138	1,510	138	1,510	Petition to institute a public use proceeding			140	110	240	55	Petition to revive - unavoidable			141	1,240	241	620	Petition to revive - unintentional			142	1,240	242	620	Utility issue fee (or reissue)			143	440	243	220	Design issue fee			144	600	244	300	Plant issue fee			122	130	122	130	Petitions to the Commissioner			123	130	123	130	Petitions related to provisional applications			126	180	126	180	Submission of Information Disclosure Stmt			581	40	581	40	Recording each patent assignment per property (times number of properties)			146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))			149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))			179	710	279	355	Request for Continued Examination (RCE)			169	900	169	900	Request for expedited examination of a design application			Other fee (specify) _____												*Reduced by Basic Filing Fee Paid						SUBTOTAL (3) (\$) 0					
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SUBMITTED BY						Complete (if applicable)	
Name (Print/Type)	A. Jose Cordina	Registration No. Attorney/Agent)	29,733	Telephone	919-420-1820		
Signature				Date	September 21, 2001		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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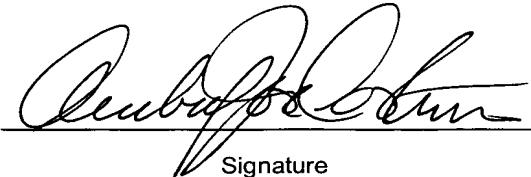
**REQUEST AND CERTIFICATION  
UNDER  
35 U.S.C. 122(b)(2)(B)(i)**

First Named Inventor		Alan Lee Taylor
Title	Method and System for Establishing, Maintaining, and Using a Persistent Fracture Log	
Atty Docket Number	40921/261784	

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

September 21, 2001

Date



Signature

A. Jose Cortina, Reg. No. 29,733

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

Burden Hour Statement: This collection of information is required by 37 CFR 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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